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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|--------------------------|---------------------|------------------|
| 09/509,932 | 09/13/2000 | Dagmar Antoni-Zimmermann | 788-027 | 1908 |

7590 07/25/2003

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EXAMINER

JAGOE, DONNA A

ART UNIT

PAPER NUMBER

1614

DATE MAILED: 07/25/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/509,932

Applicant(s)

ANTONI-ZIMMERMANN ET AL.

Examiner

Donna Jagoe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claims 1-9 are pending in this application.

In view of the appeal brief filed on 4 March 2003, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Antoni-Zimmerman et al. WO 99/08530.

The claims are drawn to a composition consisting essentially of 2-methylisothiazolin-3-one (MIT) and 3-iodo-2-propynyl-N-butylcarbamate (IPBC) in a polar or non-polar liquid medium (such as water) and with weight ratios of from 100:1 to

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1:50 to 15:1 to 1:8 and wherein the composition contains MIT and IPBC in a total concentration of from 1 to 20% by weight. Further claims are drawn to methods of combating harmful microorganisms comprising applying an effective amount of the said biocide composition and use as an additive to substances susceptible to infestation by harmful organisms.

Antoni-Zimmerman et al teach a biocide composition for use as an additive in substances which are susceptible to attack by harmful microorganisms comprising a composition of at least 2 active biocide agents of which one is MIT (see abstract). Example 13 on page 34 recites a synergistic composition of MIT and BIT with IPBC. The concentration of the biocides is recited on page 4, lines 1-7. The preferred polar liquid media are water, an aliphatic alcohol having 1-4 carbon atoms a glycol, diethylene glycol, 1,2 propylene glycol dipropylene glycol and tripropyleneglycol (page 4, lines 21-35). Regarding the claim language "consisting essentially of" although the prior art teaches the inclusion of 1,2-benzisothiazolin-3-one (BIT), the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps and those that do not materially affect the basic and novel characteristics of the claimed invention. In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). Since there is no evidence that the BIT, required by the prior art would materially affect the basic and novel characteristics (there is synergism recited in the combination of example 13 cited above for MIT, BIT combines with IPBC (page 35 lines 23-24). The weight ratios for MIT/BIT appear to be the same as the instantly claimed ratios for MIT/IPBC. The formula can be used as an additive to paints, polymer dispersions,

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plaster systems and cooling lubricants against attack by bacteria, filamentous fungi and yeasts (page 22, lines 1-7).

2. Claims 1-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Theis et al. DE 198 33 894 A1.

The claims are drawn to a composition consisting essentially of 2-methylisothiazolin-3-one (MIT) and 3-iodo-2-propynyl-N-butylcarbamate (IPBC) in a polar or non-polar liquid medium (such as water) and with weight ratios of from 100:1 to 1:50 to 15:1 to 1:8 and wherein the composition contains MIT and IPBC in a total concentration of from 1 to 20% by weight. Further claims are drawn to methods of combating harmful microorganisms comprising applying an effective amount of the said biocide composition and use as an additive to substances susceptible to infestation by harmful organisms.

Thiel et al. teach a composition comprising methylisothiazolinone (MIT) 0.5% and CARBAMAT (3-iodo propynyl butylcarbamate (IPBC)) 0.5% in water (see example 1 on page 3 and see also page 3, lines 2-6) with a pH of from 7 to 7.5 and a concentration of from 2 to 25% after diluting (see abstract). The composition is for use as *inter alia* protection additives and means of preservation and/or corrosion protection additive (page 2, lines 35-38).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valcke et al. U.S. Patent No. 5,714,507 A.

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The claims are drawn to a composition consisting essentially of 2-methylisothiazolin-3-one (MIT) and 3-iodo-2-propynyl-N-butylcarbamate (IPBC) in a polar or non-polar liquid medium (such as water) and with weight ratios of from 100:1 to 1:50 to 15:1 to 1:8 and wherein the composition contains MIT and IPBC in a total concentration of from 1 to 20% by weight. Further claims are drawn to methods of combating harmful microorganisms comprising applying an effective amount of the said biocide composition and use as an additive to substances susceptible to infestation by harmful organisms.

Valcke et al. teach biocide compositions comprising the active ingredients (I) and (II) (column 1, lines 18-27) and further comprising other microbiocides such as IPBC (column 11, line 31) and isothiazolinones such as N-methylisothiazolin-3-one. The weight ratios and pH are not recited. As stated in *In re Kerkhoven*, 626 F.2d 846, 205 USPQ 1069, at page 1072 (CCPA 1980):

It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose. *In re Susi*, 58 CCPA 1074, 1079-80, 440 F.2d 442, 445, 169 USPQ 423, 426 (1971); *In re Crockett*, 47 CCPA 1018, 1020-21, 279 F.2d 274, 276-77, 126 USPQ 186, 188 (CCPA 1960). As this court explained in *Crockett*, the idea of combining them flows logically from their having been individually taught in the prior art.

Therefore, it would have been prima facie obvious to combine the microbiocidal MIT with the microbiocidal IPBC to form a biocidal composition that is useful as an additive to substances susceptible to infestation by microorganisms. Motivation to combine flows logically from their having been individually taught in the prior art.

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Regarding the claim language "consisting essentially of" although the prior art teaches the inclusion of metconazole with a triazole, the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps and those that do not materially affect the basic and novel characteristics of the claimed invention. In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). Since there is no evidence that the metconazole required by the prior art would materially affect the basic and novel characteristics.

Thus the claims fail to patentably distinguish over the state of the art as represented by the cited references.

No claims are allowed.

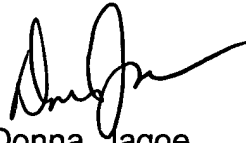
Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna Jagoe whose telephone number is (703) 306-5826. The examiner can normally be reached on Monday through Friday from 8:00 A.M. - 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marianne Seidel can be reached on (703) 308-4725. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3230 for regular communications and (703) 872-9307 for After Final communications.

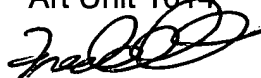
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.



Donna Jagoe
Patent Examiner
Art Unit 1614

Frederick Krass
Primary Examiner
Art Unit 1614



dj
July 20, 2003